Owner's Manual & Safety Instructions

Save This Manual Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

CENTRAL MACHINERY®

10" BENCH, 12 SPEED DRILL PRESS

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ITEM 60237

REV 13i

When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, please call 1-800-444-3353 as soon as possible.

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No portion of this manual or any artwork contained herein may be reproduced in any shape or form without the express written consent of Harbor Freight Tools.
Diagrams within this manual may not be drawn proportionally. Due to continuing improvements, actual product may differ slightly from the product described herein.
Tools required for assembly and service may not be included.

⚠WARNING

Read this material before using this product. Failure to do so can result in serious injury. SAVE THIS MANUAL.

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WARNING SYMBOLS AND DEFINITIONS	
⚠	This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.
⚠ DANGER	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
⚠ WARNING	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
⚠ CAUTION	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
NOTICE CAUTION	Addresses practices not related to personal injury.

IMPORTANT SAFETY INFORMATION

General Tool Safety Warnings

⚠ WARNING

Read all safety warnings and instructions.
Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.
Save all warnings and instructions for future reference.

1. KEEP GUARDS IN PLACE and in working order.
2. REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
3. KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
4. DON'T USE IN DANGEROUS ENVIRONMENT. Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.
5. KEEP CHILDREN AWAY. All visitors should be kept safe distance from work area.
6. MAKE WORKSHOP KID PROOF with padlocks, master switches, or by removing starter keys.
7. DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.
8. USE RIGHT TOOL. Don't force tool or attachment to do a job for which it was not designed.

Table A: RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS (120 VOLT)

NAMEPLATE AMPERES (at full load)	EXTENSION CORD LENGTH			
	25′	50′	100′	150′
0 – 6	18	16	16	14
6.1 – 10	18	16	14	12
10.1 – 12	16	16	14	12
12.1 – 16	14	12	**Do not use.**	

9. USE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table A shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

General Tool Safety Warnings (cont.)

10. WEAR PROPER APPAREL. Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
11. ALWAYS USE SAFETY GLASSES. Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
12. SECURE WORK. Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tool.
13. DON'T OVERREACH. Keep proper footing and balance at all times.
14. MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
15. DISCONNECT TOOLS before servicing; when changing accessories, such as blades, bits, cutters, and the like.
16. REDUCE THE RISK OF UNINTENTIONAL STARTING. Make sure switch is in off position before plugging in.
17. USE RECOMMENDED ACCESSORIES. Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.
18. NEVER STAND ON TOOL. Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
19. CHECK DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function – check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
20. DIRECTION OF FEED. Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
21. NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF. Don't leave tool until it comes to a complete stop.

Grounding Instructions

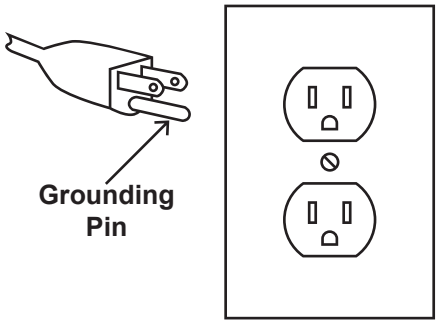
⚠WARNING

TO PREVENT ELECTRIC SHOCK AND DEATH FROM INCORRECT GROUNDING WIRE CONNECTION READ AND FOLLOW THESE INSTRUCTIONS:

110-120 V~ Grounded Tools: Tools with Three Prong Plugs

1. In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.
2. Do not modify the plug provided – if it will not fit the outlet, have the proper outlet installed by a qualified electrician.
3. Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.
4. Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.
5. Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug.
6. Repair or replace damaged or worn cord immediately.

110-120 V~ Grounded Tools: Tools with Three Prong Plugs (cont.)



125 V~ 3-Prong Plug and Outlet
(for up to 125 V~ and up to 15 A)

7. This tool is intended for use on a circuit that has an outlet that looks like the one illustrated above in **125 V~ 3-Prong Plug and Outlet**. The tool has a grounding plug that looks like the plug illustrated above in **125 V~ 3-Prong Plug and Outlet**.
8. The outlet must be properly installed and grounded in accordance with all codes and ordinances.
9. Do not use an adapter to connect this tool to a different outlet.

Drill Press Safety Warnings

For Your Own Safety Read Instruction Manual Before Operating Drill Press

1. Wear eye protection.
2. Do not wear gloves, necktie, or loose clothing.
3. Clamp workpiece or brace against column to prevent rotation.
4. Use recommended speed for drill accessory and workpiece material.
5. The included chuck key is specially designed to be self-ejecting, reducing the risk of ejecting at high speed. Only use the included chuck key or an identical replacement key.
6. **DO NOT OPERATE WITH ANY GUARD DISABLED, DAMAGED, OR REMOVED. Moving guards must move freely and close instantly.**
7. The use of accessories or attachments not recommended by the manufacturer may result in a risk of injury to persons.
8. When servicing use only identical replacement parts.
9. Only use safety equipment that has been approved by an appropriate standards agency. Unapproved safety equipment may not provide adequate protection. Eye protection must be ANSI-approved and breathing protection must be NIOSH-approved for the specific hazards in the work area.
10. Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
11. Industrial applications must follow OSHA guidelines.
12. Maintain labels and nameplates on the tool. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
13. Avoid unintentional starting. Prepare to begin work before turning on the tool.
14. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure.
15. WARNING: Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contains chemicals known [to the State of California] to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
    • Lead from lead-based paints
    • Crystalline silica from bricks and cement or other masonry products
    • Arsenic and chromium from chemically treated lumber
    Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. (California Health & Safety Code § 25249.5, *et seq.*)
16. WARNING: Handling the cord on this product will expose you to lead, a chemical known to the State of California to cause cancer, and birth defects or other reproductive harm. Wash hands after handling. (California Health & Safety Code § 25249.5, *et seq.*)
17. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Vibration Safety

This tool vibrates during use. Repeated or long-term exposure to vibration may cause temporary or permanent physical injury, particularly to the hands, arms and shoulders. To reduce the risk of vibration-related injury:

1. Anyone using vibrating tools regularly or for an extended period should first be examined by a doctor and then have regular medical check-ups to ensure medical problems are not being caused or worsened from use. Pregnant women or people who have impaired blood circulation to the hand, past hand injuries, nervous system disorders, diabetes, or Raynaud's Disease should not use this tool. If you feel any medical or physical symptoms related to vibration (such as tingling, numbness, and white or blue fingers), seek medical advice as soon as possible.
2. Do not smoke during use. Nicotine reduces the blood supply to the hands and fingers, increasing the risk of vibration-related injury.
3. Use tools with the lowest vibration when there is a choice between different processes.
4. Include vibration-free periods each day of work.
5. Grip tool as lightly as possible (while still keeping safe control of it). Let the tool do the work.
6. To reduce vibration, maintain the tool as explained in this manual. If any abnormal vibration occurs, stop use immediately.

SAVE THESE INSTRUCTIONS.

Specifications

Electrical Rating	120V~ / 60Hz / 3.85A
Spindle Speeds	300, 370, 470, 570, 630, 690, 950, 1400, 1620, 1760, 2550, 2900 RPM 12 Speeds
Table Tilt	45º left and right
Swing	10"
Spindle Stroke	2-3/8"
Spindle Taper	B16
Chuck Capacity	5/8″ (16mm)

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227541

Setup - Before Use

Read the ENTIRE IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

WARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:
Turn the Power Switch of the tool off and unplug the tool from its electrical outlet before performing any procedure in this section.

Note: For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.

Mounting

Secure the tool to a supporting structure before use. Before assembly, bolt the Base to a flat, level, solid workbench capable of supporting the weight of the drill press and any workpieces.

Verify that installation surface has no hidden utility lines before drilling or driving screws.

Assembly

Column to Base

1. Place Column (6) on the Base (1) and align holes in the Column with holes in the Base.
2. Attach using Bolt (5), Washer (3) and Spring Washer (4) in each hole through the Column and into the Base.

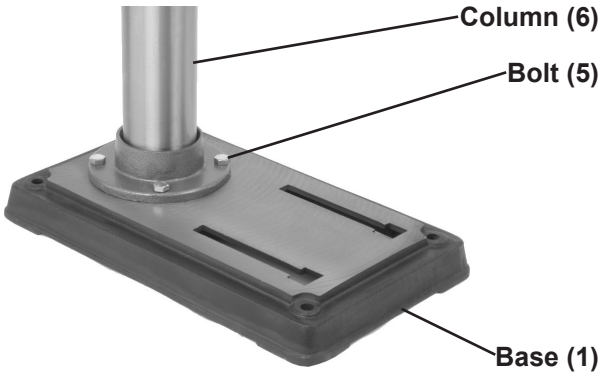

Figure A: Column to Base Connection

Table Support

1. Place the Table Support (21) over the Rack (7).
2. Slide the Table Support over the Column (6).

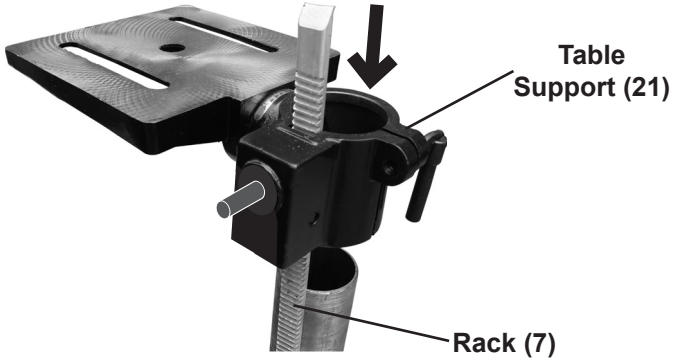

Figure B: Installing Table Support

3. Slide the Collar (16) over the Column (6) with the beveled edge facing down until it presses against the top of the Rack (7).
   Tighten the Set Screw (17), but do not overtighten it.

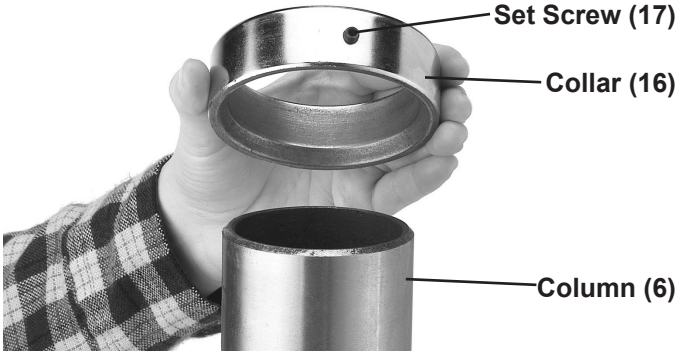

Figure C: Column Ring Installation

4. Slide the Height Crank (23) over the Shaft (24) on the side of the Table Support (21). Secure it to the Shaft using the Screw (22) against the flat part of the Shaft.

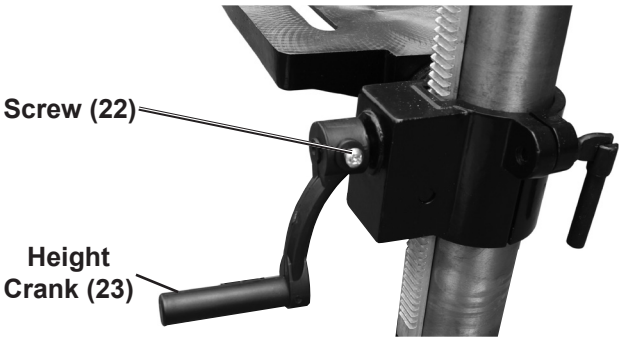

Figure D: Installing Height Crank

Headstock to Column

1. Loosen the two Set Screws (17) on the left side of the Headstock (67) so they will stay clear while installing it.
2. With the help of an assistant, lift the Headstock above the Column (6), and gently slide it down the Column as far as it will go.
3. Tighten the two Set Screws to secure the Headstock in place.

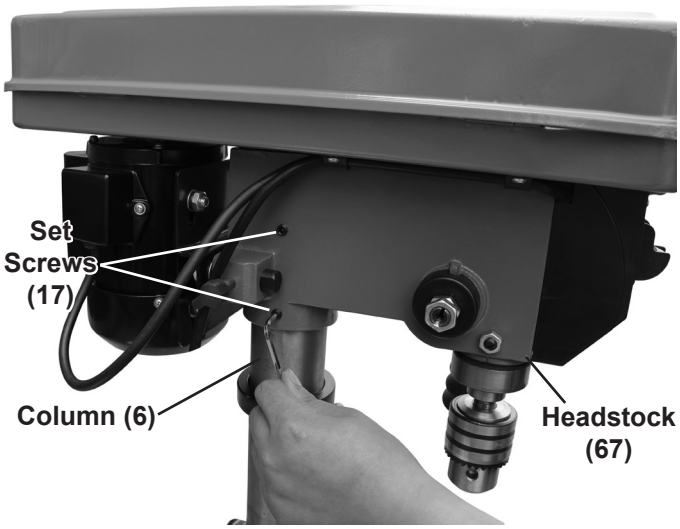

Figure E: Installing Headstock

Feed Handles / Bars

Thread the Feed Bars (9) into the Feed Bar Seat (10) and tighten them.

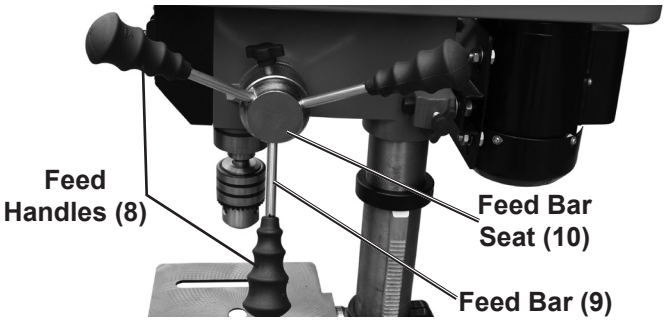

Figure F: Installing Feed Handles

Installing the Chuck

1. Thoroughly clean the Arbor (30) and the tapered hole in the Chuck (29) of all dirt, grease, oil, and protective coatings. Make sure all parts are thoroughly clean, dry and burr free.
2. Insert the Arbor into the end of the Spindle (31). If necessary, rotate the Arbor to ensure that it is correctly positioned and fully inserted into the Spindle shaft. Firmly tap the Arbor nose with a rubber mallet.
3. Open the jaws of the Chuck to their maximum, using the supplied Chuck Key.
4. Slide the Chuck onto the Arbor nose as far as it will go.
5. Hold a piece of scrap wood against the Chuck nose to protect it and firmly tap the wood with a rubber mallet to ensure proper seating and a solid fit of the Chuck on the Spindle.

Read the ENTIRE IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Tool Set Up

⚠WARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:
Turn the Power Switch of the tool off and unplug the tool from its electrical outlet before performing any procedure in this section.

TO PREVENT SERIOUS INJURY:
DO NOT OPERATE WITH ANY GUARD DISABLED, DAMAGED, OR REMOVED.
Moving guards must move freely and close instantly.

Table Adjustment

1. Raise or lower the Table by loosening the Pivot Lever (20) and turning the Height Crank (23), clockwise to raise and counterclockwise to lower.
2. Pivot the Table (26) around the Column (6) by loosening the Pivot Lever (20). The entire Table assembly and Rack (7), will move as one around the Column.
3. Tilt the Table by loosening the Angle Bolt (28) and tilting to the required angle. The angle can be read using the Angle Scale (25).
4. TO ENSURE THAT THE DRILL IS ENTIRELY PERPENDICULAR TO THE TABLE, insert a straight round bar (not included) in the Chuck (29), place a square on the Table (26) and bring it up to the round bar. Adjust the angle as needed.

CAUTION! To prevent injury from unexpected Table movement, tighten Angle Bolt (28) and Pivot Lever (20) after adjustment.

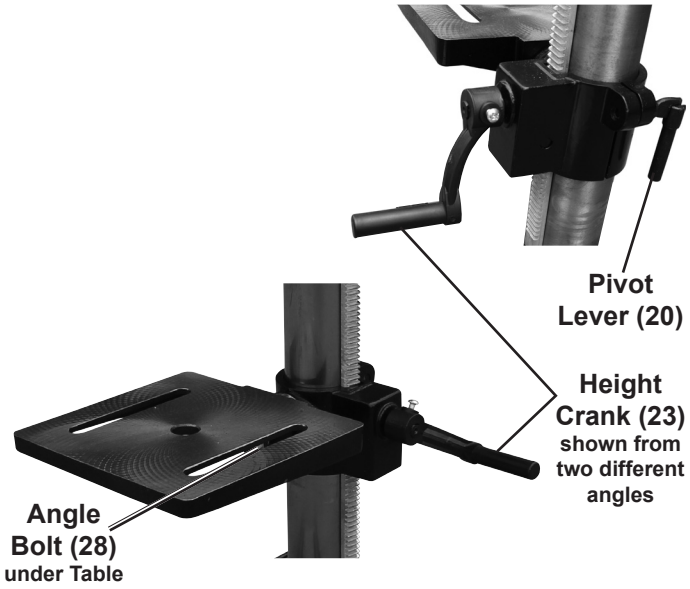

Figure G: Table Adjustment

Setting a Drilling Depth

Located around the Spindle Feed Shaft is a Depth Stop Collar (A) with a scale. The collar is capable of turning about the shaft, and may be locked in place by a Locking Screw (B).

1. Lower the drill (with the power OFF) so that it contacts the material and hold in that position.
2. Loosen the locking screw and turn the collar so that the measurement for the depth of the hole required is in line with the pointer (C).
3. Lock the collar in this position using the locking screw.

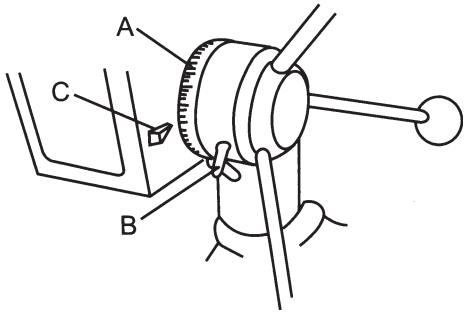

Figure H: Drill Depth Adjustment

Changing Drill Speed

Before changing the speeds, make sure the machine is switched OFF and UNPLUGGED.

1. Open the pulley cover.
2. Loosen the Motor Tension Knob (70) on each side of the Headstock (67), and move the Motor (77) towards the Headstock to relieve tension on the Belts (43, 80).

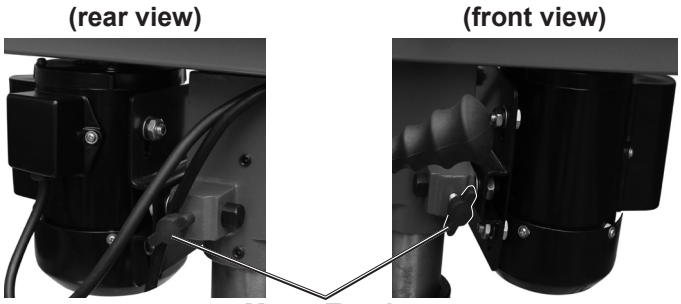

Figure I: Motor Tension Knob locations

3. Consult the chart below and position the Belts (43, 80) on the Pulleys (42, 46, 78) according to the desired drill speed.
4. When the Belts have been correctly positioned, tighten them by pushing the Motor away from the Headstock until the belt deflects by approximately 1/2″ at its center when using reasonable thumb pressure. Lock this position in with the two Motor Tension Knobs (70).

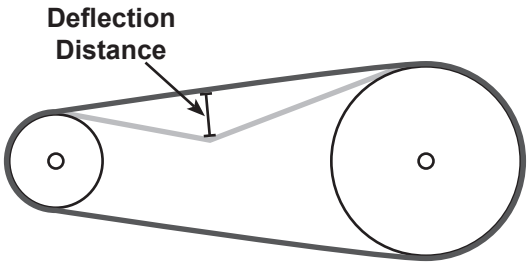

Figure J: Belt Deflection

Note: If either belt is too long to be properly tensioned, it must be replaced.

300 RPM Spindle Motor	370 RPM Spindle Motor	470 RPM Spindle Motor	570 RPM Spindle Motor
630 RPM Spindle Motor	690 RPM Spindle Motor	950 RPM Spindle Motor	1400 RPM Spindle Motor
1620 RPM Spindle Motor	1760 RPM Spindle Motor	2550 RPM Spindle Motor	2900 RPM Spindle Motor

Figure K: Drill Speed Table

The table above shows the belt arrangements for given drill speeds.
A full chart is also located on the inside of the pulley cover.

Drill Bit Installation

1. Insert the drill bit into the jaws of the Chuck approximately 1″, ensuring that the jaws do not touch the flutes of the drill bit.
2. Before tightening the Chuck, ensure that the drill bit is centered within the jaws.
3. Tighten the Chuck securely with the included Chuck Key.

Workpiece and Work Area Set Up

1. Designate a work area that is clean and well-lit. The work area must not allow access by children or pets to prevent distraction and injury.
2. Route the power cord along a safe route to reach the work area without creating a tripping hazard or exposing the power cord to possible damage. The power cord must reach the work area with enough extra length to allow free movement while working.
3. Secure loose workpieces using a vise or clamps (not included) to prevent movement while working.
4. There must not be objects, such as utility lines, nearby that will present a hazard while working.
5. Make sure the table height and position is set so that the drill travel range is sufficient for the material to be drilled.
6. Make sure the work is securely clamped. That is, held in a drill vise, or bolted to the table. Never hold the material with your bare hands while drilling. Severe personal injury may be caused if the material is flung out of the operator's hand.
7. IF THE MATERIAL IS IRREGULARLY SHAPED and cannot be laid flat on the table, it should be securely blocked and clamped. Any tilting, twisting or shifting will result not only in a roughly drilled hole but also increases the chances of damage to the drill.
8. FOR FLAT WORK, lay the piece on to a wooden base and clamp it down firmly against the table to prevent it from turning.
9. FOR SMALL MATERIALS that cannot be clamped to the table, use a drill press vise. Make sure the vise is clamped or bolted to the table.
10. WHEN DRILLING COMPLETELY THROUGH WOOD, position a piece of scrap wood between the material and the table to prevent splintering on the underside of the material as the drill breaks through. The scrap piece of wood must make contact with the left side of the column. Securely clamp the other end of the scrap wood to the table. Also, set the depth of the drill so that the drill will not come in contact with the table - or align the table so that the hole in its center is in line with the drill bit.

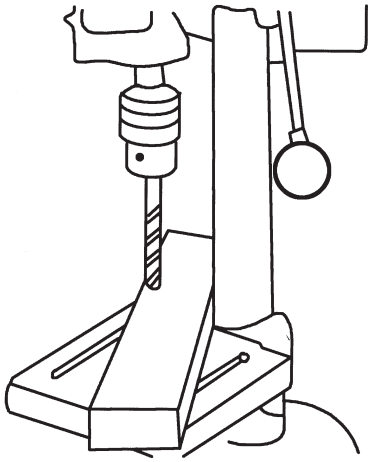

Figure L: Bracing workpiece against column

General Operating Instructions

1. Bring the drill bit down with the Feed Knob to where the hole is to be drilled.
   Make minor workpiece alignment adjustments.
2. Plug the Power Cord into an electrical outlet.
3. Turn the Drill Press on.
4. Pull down on the Feed Knob and slowly drill the hole into the workpiece.

WARNING! If the drill bit grabs and spins the workpiece, do not attempt to stop the spinning with your hands. Step back, and turn the drill press off. Wait for the spindle to stop turning before dislodging the workpiece.

5. To prevent accidents, turn off the tool and disconnect its power supply after use. Clean, then store the tool indoors out of children's reach.

Procedures not specifically explained in this manual must be performed only by a qualified technician.

⚠WARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:
Turn the Power Switch of the tool off and unplug the tool from its electrical outlet before performing any procedure in this section.

TO PREVENT SERIOUS INJURY FROM TOOL FAILURE:
Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

Cleaning, Maintenance, and Lubrication

1. **BEFORE EACH USE,** inspect the general condition of the tool. Check for:
   - loose hardware,
   - misalignment or binding of moving parts,
   - cracked or broken parts,
   - damaged electrical wiring, and
   - any other condition that may affect its safe operation.
2. **AFTER USE,** wipe external surfaces of the tool with clean cloth.
3. **⚠WARNING! If the supply cord of this power tool is damaged, it must be replaced only by a qualified service technician.**

Belt Inspection and Tensioning

1. Examine belt for cracks, tears in the backing, and other damage.
2. Replace belt if damaged, following the instructions under Changing Drill Speed on page 9.

Troubleshooting

Problem	Possible Causes	Likely Solutions
Tool will not start.	1. Cord not connected. 2. No power at outlet. 3. Tool's thermal reset breaker tripped (if equipped). 4. Internal damage or wear. (Carbon brushes or switch, for example.)	1. Check that cord is plugged in. 2. Check power at outlet. If outlet is unpowered, turn off tool and check circuit breaker. If breaker is tripped, make sure circuit is right capacity for tool and circuit has no other loads. 3. Turn off tool and allow to cool. Press reset button on tool. 4. Have technician service tool.
Tool operates slowly.	Extension cord too long or wire size too small.	Eliminate use of extension cord. If an extension cord is needed, use one with the proper diameter for its length and load. See **Table A** on page 2.
Performance decreases over time.	1. Accessory dull or damaged. 2. Carbon brushes worn or damaged.	1. Keep cutting accessories sharp. Replace as needed. 2. Have qualified technician replace brushes.
Excessive noise or rattling.	1. Internal damage or wear. (Carbon brushes or bearings, for example.) 2. Belt (if equipped) too loose (slipping) or too tight (bearing damage).	1. Have technician service tool. 2. Properly tension belt.
Overheating.	1. Forcing machine to work too fast. 2. Accessory dull or damaged. 3. Blocked motor housing vents. 4. Motor being strained by long or small diameter extension cord.	1. Allow machine to work at its own rate. 2. Keep cutting accessories sharp. Replace as needed. 3. Wear ANSI-approved safety goggles and NIOSH-approved dust mask/respirator while blowing dust out of motor using compressed air. 4. Eliminate use of extension cord. If an extension cord is needed, use one with the proper diameter for its length and load. See **Table A** on page 2.

Follow all safety precautions whenever diagnosing or servicing the tool. Disconnect power supply before service.

PLEASE READ THE FOLLOWING CAREFULLY

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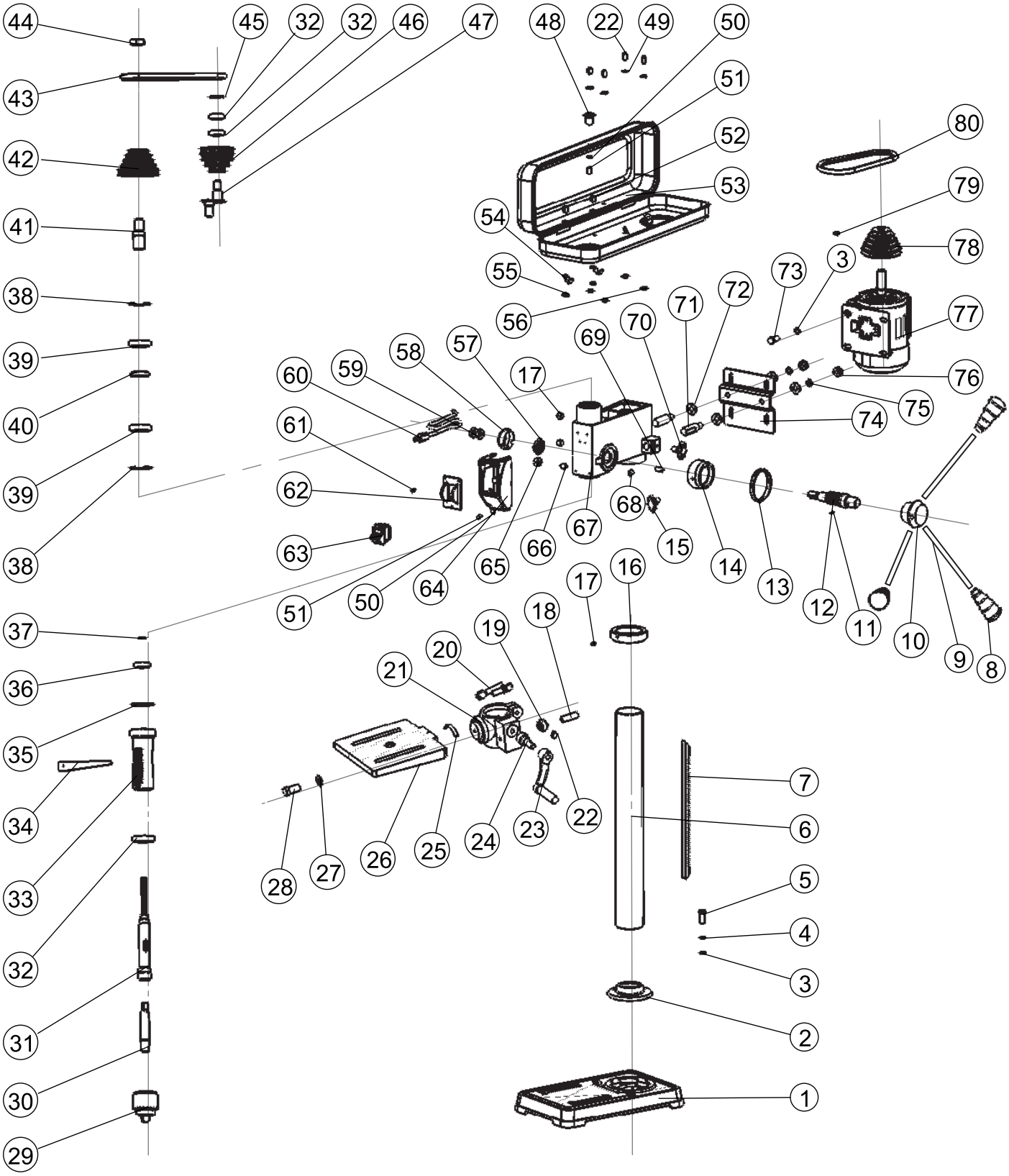
Parts List

Part	Description	Qty
1	Base	1
2	Column Support	1
3	Flat Washer 8	7
4	Spring washer	7
5	Bolt M8×25	3
6	Column	1
7	Rack	1
8	Feed Handle	3
9	Feed Bar	3
10	Feed Bar Seat	1
11	Pin 5×30	1
12	Shaft Pinion	1
13	Depth Scale	1
14	Depth Stop	1
15	Fastening knob	1
16	Collar	1
17	Set Screw M8×10	3
18	Axle	1
19	Gear	1
20	Table Pivot Lever	1
21	Table Support	1
22	Screw M6×12	5
23	Height Crank	1
24	Shaft	1
25	Angle Scale	1
26	Table	1
27	Spring Washer 12	1
28	Angle Bolt M12×30	1
29	Chuck	1
30	Arbor	1
31	Spindle	1
32	Ball Bearing 6201	1
33	Spindle Sleeve	1
34	Key	1
35	O-Ring	1
36	Ball Bearing 6005	1
37	Retaining Ring 12	1
38	Retaining Ring 42	2
39	Ball Bearing 6004	2
40	Bushing	1

Part	Description	Qty
41	Internal Spindle Sleeve	1
42	Spindle Pulley	1
43	V-Belt 0-480	1
44	Nut M20×1.5	1
45	Retaining Ring 32	1
46	Middle Pulley	1
47	Pulley Adjuster	1
48	Knob	1
49	Flat Washer 6	4
50	Flat Washer 5	3
51	Screw M5×10	5
52	Screw M6×10	2
53	Pulley Cover	1
54	Wire Clamp	2
55	Nut M6	2
56	Rubber Pad	4
57	Tension Spring	1
58	Spring Cap	1
59	Nut M12×1.5	2
60	Power Cord	1
61	Screw ST2.9×10	3
62	Switch Cover	1
63	Power Switch	1
64	Switch Box	1
65	Nut M8	1
66	Screw	1
67	Headstock	1
68	Depth Pointer	1
69	Round Pin	1
70	Knob	2
71	Motor Support	2
72	Flat Washer 10	4
73	Bolt M8×20	4
74	Motor Bracket	1
75	Spring Washer 10	2
76	Nut M10	2
77	Motor	1
78	Motor Pulley	1
79	Screw M6×10	1
80	V-Belt 0-450	1

Assembly Diagram



Record Product's Serial Number Here:_____

Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

Limited 90 Day Warranty

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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